|   | Application No.  | Applicant(s)  |
|---|--|---|
| Notice of Allowability  | 10/502,465   | NASSIOPOULOU ET AL.   |
|   | Examiner   | Art Unit  |
|   | Fraderick E. Besenherger   | 2884  |
|   | Frederick F. Rosenberger   | 2884  |
| The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313 | (OR REMAINS) CLOSED in this ap<br>or other appropriate communication<br>IGHTS. This application is subject t | plication. If not included not will be mailed in due course. THIS |
| 1. This communication is responsive to the amendment filed 16 January 2007.   |  |   |
| 2. The allowed claim(s) is/are 32-40.   |  | •   |
| <ul> <li>3.  Acknowledgment is made of a claim for foreign priority unerstanding a)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> </ul>   |  |   |
| 2. Certified copies of the priority documents have been received in Application No  |  |   |
| 3. 🗵 Copies of the certified copies of the priority documents have been received in this national stage application from the  |  |   |
| International Bureau (PCT Rule 17.2(a)).  |  |   |
| * Certified copies not received:  |  |   |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.                                      |  |   |
| 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.  |  |   |
| 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  |  |   |
| (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached  |  |   |
| 1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date  |  |   |
| (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of<br>Paper No./Mail Date   |  |   |
| Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).   |  |   |
| 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.   |  |   |
|   |  |   |
| •   |  |   |
|   |  |   |
|   |  |   |
| Attachment(s) 1. ☑ Notice of References Cited (PTO-892)   | 5. Notice of Informal F  | Patent Application  |
| 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  | 6. ☐ Interview Summary   | ' '   |
|   | Paper No./Mail Da  | te .  |
| Information Disclosure Statements (PTO/SB/08),     Paper No./Mail Date  | 7. Examiner's Amend  | ment/Comment  |
| 4. Examiner's Comment Regarding Requirement for Deposit   | 8. 🛛 Examiner's Stateme  | ent of Reasons for Allowance                                      |
| of Biological Material  | 9. 🔲 Other   |   |
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in this application.

## **DETAILED ACTION**

## Response to Amendment

Applicant's reply, filed 16 January 2007, has been received and entered.
 Accordingly, claims 32, 35, 38, and 40 have been amended. Claims 1-31 have been cancelled. No new claims have been added. Thus, claims 32-40 are currently pending

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2. Applicant's amendment of the claims has successfully overcome the objections

to claims 38 and 40, as detailed in paragraph 2 of the previous Office action.

## Allowable Subject Matter

3. Claims 32-40 are allowed.

4. The following is an examiner's statement of reasons for allowance: The reasons

for allowance for claims 32-40 have been previously communicated in the Office action

mailed 18 October 2006.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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## Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tsamis et al. (US Patent Application # 2004/0195096) has a common inventor with the present application and was filed after the foreign priority date for the present application. Tsamis et al. teach a different silicon processing method for microchannel formation with a porous silicon layer. Further, Tsamis et al. teach similar device configurations using a porous silicon layer as recited in claims 39 and 40, but fail to address the use of a heater with first and second thermocouples or resistors, a passivation layer, and inlet/outlet regions for the microchannel.

Isaka et al. (US Patent # 5,482,598) teach a prior art method of forming a microchannel using porous silicon wherein a high temperature treatment is used to form the microchannel rather than a change in current density.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick F. Rosenberger whose telephone number is 571-272-6107. The examiner can normally be reached on Monday - Friday with flexible hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Frederick F. Rosenberger Patent Examiner GAU 2884

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